V.A.5.N.n.1. SPARTINA ALTERNIFLORA TIDAL HERBACEOUS ALLIANCE

Saltmarsh Cordgrass Tidal Herbaceous Alliance

Physiognomic Class	Herbaceous Vegetation (V.)
Physiognomic Subclass	Perennial graminoid vegetation (grassland) (V.A.)
Physiognomic Group	Temperate or sub-polar grassland (V.A.5.)
Physiognomic Subgroup	Natural/Semi-natural (V.A.5.N.)
Formation	Tidal temperate or subpolar grassland (V.A.5.N.n.)

Alliance **SPARTINA ALTERNIFLORA TIDAL HERBACEOUS ALLIANCE (V.A.5.N.n.1.)**

Spartina alterniflora / (Ascophyllum nodosum) Acadian/Virginian Zone Herbaceous Vegetation

Saltmarsh Cordgrass / (Yellow Tang) Acadian/Virginian Zone Herbaceous Vegetation

Spartina Low Salt Marsh

CLASSIFICATION CONFIDENCE LEVEL: 1

USFS WETLAND SYSTEM: ESTUARINE

RANGE:

Fire Island National Seashore

This association occurs in salt marshes on the bay side of Fire Island. It also occurs on the salt marsh on Moriches Bay on the William Floyd Estate.

Globally

This community occurs in estuaries from southern Maine to Cape Hatteras, North Carolina.

ENVIRONMENTAL SETTING:

Fire Island National Seashore

This low salt marsh occurs on the bay side of the barrier islands often adjacent to salt pannes. The substrate is characterized by shallow peat over old overwash / inlet flood delta deposits.

Globally

This low salt marsh of the northeastern coastal reagion is generally limited to the zone between mean sea level and the mean high water level. The habitat occurs in protected inlets behind barrier beaches or in drowned river valleys. Peat depth ranges from a few feet, if the community formed over a mud flat, to 80 feet in drowned river valleys.

MOST ABUNDANT SPECIES:

Fire Island National Seashore

Stratum	Species
Herbaceous	*Spartina alterniflora*

Globally

Stratum	Species
Herbaceous	*Spartina alterniflora, Salicornia* spp.

CHARACTERISTIC SPECIES:

Fire Island National Seashore

Spartina alterniflora, Salicornia spp.

Globally

Spartina alterniflora, Ascophyllum nodosum, Ulva lactuca, *Fucus vesiculosus*

VEGETATION DESCRIPTION:

Fire Island National Seashore

This low salt marsh community has low species diversity and is strongly dominated by *Spartina alterniflora. Spartina patens, Distichlis spicata,* and *Salicornia* spp. occur with low cover. *Ulva lactuca* occurs sporadically throughout, but with low percent cover.

Globally

Spartina alterniflora is limited to the low marsh zone by moderate salinity; it can withstand longer submergence than other salt marsh grasses but still requires periodic exposure of the substrate. It also requires moderately high levels of iron (7-15 ppm). This community is commonly known as the "low salt marsh," occurring as a tall grassland strongly dominated by *Spartina alterniflora*. There is little variation in vascular plant species composition across the range. It occurs in nearly pure stands, with occasional low-growing species such as *Spergularia salina (= Spergularia marina), Salicornia* spp., *Suaeda maritima*, and seaweeds such as *Ulva lactuca* and other algae such as *Fucus vesiculosus* and *Ascophyllum nodosum*, which grow at the bases of the *Spartina* plants (Moul 1973). Herbs of *Salicornia virginica* and *Salicornia bigelovii* can be quite common mixed in with the *Spartina*, often becoming more apparent later in the growing season. *Limonium carolinianum* is another characteristic herb but only as scattered individuals. The northern limit is determined by a slower accumulation of silt and corresponding absence of algal species (Chapman 1937).

COMMENTS:

Fire Island National Seashore

Globally

Ascophyllum nodosum may be sparse or absent from southern occurrences of this community, but these occurrences are placed within this type because of the associated characteristic faunal assemblage, including *Uca pugnax, Littorina saxatilis, Littorina obtusata*, and *Brachidontes demissus*.

Synonymy: Salt marsh, in part (Higgins et al. 1971), Salt marsh community, in part (Hill 1986), *Spartina alterniflora* community (Metzler and Barrett 1996), Salt marsh complex, low marsh (Breden 1989), Low salt marsh (Reschke 1990), Cordgrass saltmarsh community (Maine Natural Heritage Program (MENHP) 1991), Low salt marsh community (Sperduto 1997)

States/Provinces: CT:S?, DE:S?, MA:S?, MD:S?, ME:S?, NC?, NH:S?, NJ:S?, NY:S?, RI:S?, VA:S?

OTHER NOTEWORTHY SPECIES:

CONSERVATION RANK: G5

DATABASE CODE: CEGL004192

MAP UNITS: FIIS plots 4, 5, 23, 54

REFERENCES:

Breden 1989
Higgins et al. 1971
Hill 1986
Maine Natural Heritage Program 1991
Metzler and Barrett 1996
Moul 1973
Reschke 1990
Sperduto 1997
Stalter 1979